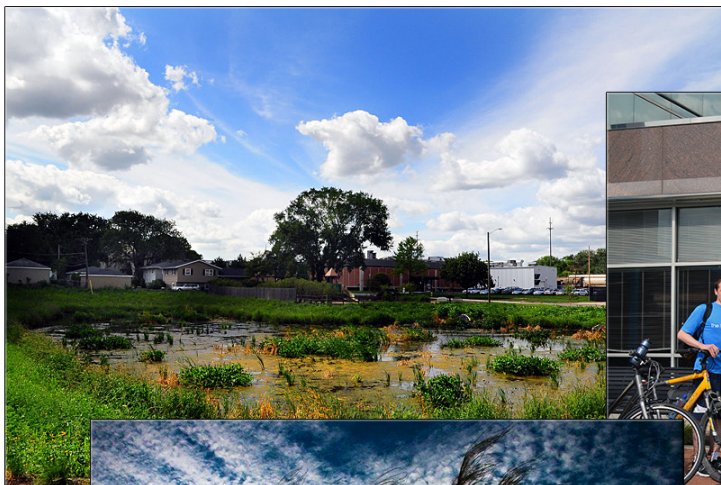


2013 Illinois Governor's Sustainability Awards & Illinois Campus Sustainability Compact Awards Program



**October 29, 2013
Embassy Suites
Conference Center
Peoria, IL**



**ILLINOIS SUSTAINABLE
TECHNOLOGY CENTER**
PRAIRIE RESEARCH INSTITUTE



Governor's Sustainability Awards

The Illinois Sustainable Technology Center (ISTC) and the Office of the Governor are honoring twenty-seven Illinois companies and organizations this year for their significant achievements in energy efficiency, waste reduction, pollution prevention and environmental programming. Since 1987, the Illinois Sustainable Technology Center, a division of the Prairie Research Institute at the University of Illinois at Urbana-Champaign, has presented Governor's Awards to organizations in Illinois that have demonstrated a commitment to environmental excellence through outstanding and innovative sustainability practices. Any Illinois public or private organization is eligible to apply for an award. Winners are selected through a rigorous process of review and examination by ISTC technical assistance experts.

This year we have added the Honorable Mention category to recognize fourteen organizations whose successes are also worthy of holding up as models of sustainability.

As our Interim Director, David Thomas, Ph.D., has noted: "In working for a greener tomorrow, these businesses and organizations not only help preserve our resources, protect our environment, reduce their costs and increase their competitiveness, they also help develop more sustainable technologies and become our greatest allies in the diffusion of new ideas and new attitudes about how business is done in Illinois."

More information can be found at istc.illinois.edu.



Agenda

2013

Illinois Governor's Sustainability Awards
and recognition of the
Illinois Campus Sustainability Compact Universities & Colleges

Presented by: Illinois Sustainable Technology Center (ISTC)
Prairie Research Institute (PRI)
University of Illinois at Urbana-Champaign

Symposium*

8:30 a.m. Registration, Continental Breakfast, Displays & Networking

9:00 a.m. Welcome – Program Moderator
Debra Jacobson, Technical Assistance Manager,
ISTC, PRI

9:10 a.m. **Technical Symposium**
Waste Characterization for Zero Waste Goals
Seth Riens – ISTC, PRI

Reducing E-Waste Through Purchasing Decisions
Margaret Renas – Delta Institute

IEPA P2 Intern Program
Kevin Greene – Illinois Environmental Protection
Agency

*Illinois Groundwater Source Geothermal
Resources Relevant to Using Heat Pumps for
Heating & Cooling*
Xinli Lu, Ph.D. – ISTC, PRI
Tom Holm, Ph.D. – Illinois State Water Survey, PRI
Dave Larson – Illinois State Geological Survey, PRI



11:40 a.m. Adjourn for Networking Break

Awards Ceremony

12:00 p.m. Awards Luncheon

1:00 p.m. **Awards Ceremony***

Welcome Remarks and Introduction

David Thomas, Ph.D., Interim Director, ISTC,
PRI

*Keynote Address – Is Sustainability Still
Possible?*

Erik Assadourian, Worldwatch Institute

Remarks from Governor Pat Quinn

Moderator

Debra Jacobson, Technical Assistance Manager,
ISTC, PRI

2:00 p.m. *Presentation of the Sustainability Awards*

David Thomas, Ph.D., Interim Director, ISTC &
Pat Quinn, Governor

Presentation of the Campus Compact Awards

Gary Miller, Ph.D., Assoc. Executive Director, PRI

Awards Presentation Moderator

John Mulrow, Business & Industrial Sustainability
Specialist, ISTC, PRI

2:45 p.m. Adjourn & Photo Session

* Order of speakers subject to change



Table of Contents

| Governor's Sustainability Awards | Page |
|---------------------------------------------------------------------------------------|-------------|
| AbbVie | 6 |
| Aptar Cary Campus | 7 |
| Caterpillar Inc. - Technical Center | 7 |
| Champaign-Urbana Mass Transit District | 8 |
| Chem Processing, Inc. | 9 |
| City of Joliet | 10 |
| ComEd | 11 |
| Eaton's Cooper B-Line | 11 |
| Elmhurst Park District | 12 |
| Forest Preserve District of DuPage County | 13 |
| Hilton Chicago | 14 |
| J.L. Clark | 15 |
| Jefferson Middle School | 15 |
| The Label Printers LP | 16 |
| Lewis and Clark Community College | 17 |
| McDonald's Corporation | 18 |
| Metropolitan Mayor's Caucus/Illinois Emerald Ash Borer Wood Utilization Team | 19 |
| Multifilm Packaging | 20 |
| Niles Township School District 219 with Beyond Green Partners..... | 20 |
| Quaker Foods North America - Bridgeview | 21 |
| Quaker Foods North America - Danville | 22 |
| United Airlines | 22 |
| University of Illinois at Chicago | 23 |
| University of Illinois at Urbana-Champaign | 24 |
| Village of Arlington Heights | 25 |
| Village of Bolingbrook | 26 |
| Village of Downers Grove | 27 |



Table of Contents

| Honorable Mention | Page |
|---------------------------------------------------------|-------------|
| Argonne National Laboratory | 27 |
| CCI Manufacturing IL Corporation | 28 |
| Christopher B. Burke Engineering, Ltd. | 28 |
| City of Evanston | 29 |
| Clarke | 29 |
| Clover Technologies Group | 29 |
| Ecology Action Center | 30 |
| First Busey Corporation. | 30 |
| Illinois Department of Military Affairs | 31 |
| Illinois Department of Transportation | 31 |
| Illinois Green Business Association | 32 |
| Lawrence Foods | 32 |
| Portapure, LLC | 33 |
| Will County | 33 |
| Campus Sustainability Compact Awards Program | 34 |
| Danville Area Community College | 34 |
| Heartland Community College | 35 |
| Lewis University | 35 |
| McHenry County Community College | 36 |
| Northwestern University | 37 |
| Prairie State College | 37 |
| Roosevelt University | 38 |
| Conference Greening Elements | 39 |

(Project descriptions supplied by the organizations)



Governor's Sustainability Award - Winners

AbbVie – North Chicago

First Time Recipient

AbbVie is a global, research-based biopharmaceutical company with markets in over 170 countries. The company's mission is to use its expertise, dedicated people and a unique approach to innovation to develop and market advanced therapies that address some of the world's most complex and serious diseases. AbbVie employs 7,000 people in Illinois and 21,000 worldwide.

In 2012, AbbVie teams developed projects which resulted in the reduction of water usage, solvent use, green chemistry initiatives, and CO₂ emissions reductions. AbbVie completed several projects at its Illinois facilities to redesign processes to reduce water and methanol solvent use; improve HVAC systems to reduce air changes and improve efficiency; optimize site utility operations through the installation of a heat recovery system for boiler operations and improve the energy efficiency of a chilled water distribution pump; and optimize equipment to generate steam and compressed air more efficiently. AbbVie Research and Development focused on reducing hazardous chemical use through substitution of safer and more environmentally friendly chemicals for common research tasks and improved segregation of chemicals used. Combined, the projects provided annual reductions of approximately 4,733,000 kWh of electricity, 4,248 therms of natural gas, 1,678,655 gallons of H₂O, and solvent and waste reduction of 47,800 pounds. These projects helped drive plant operating costs down while reducing AbbVie's carbon footprint by approximately 6,000 tons of CO₂.



Aptar – Cary Campus

First Time Recipient

The Aptar Cary Campus is comprised of three manufacturing facilities, Aptar Cary, Aptar Cary Molding Center, and Aptar McHenry. Combined, there are 87 finished goods assembly machines, 44 injection molding presses, and a total facility space of 270,000 square feet.


Aptar has in place a cross-functional sustainability team that analyzes metrics, communicates with employees, reviews new ideas from either team members or employee suggestions, and drives action. The team also recognizes employees for sustainability achievements. Since 2009 the sustainability team has established a recycled material flow process on the production floor, installed a new energy conserving roof at the Molding Center, made lighting retrofits, reduced disposable box and shrink wrap usage, and replaced old battery chargers with high frequency chargers. Manufacturing has also been oriented toward light weighting and component minimization. In 2012, the Aptar Cary Campus decreased waste sent to landfill by 48 percent over the prior year.

Caterpillar Inc. Technical Center – Mossville

Continuous Improvement

The Caterpillar Inc. Technical Center, in Mossville, employs 2,500 people and is home to a variety of engineering teams working on improving the efficiency and environmental performance of Caterpillar products.

In 2012, Caterpillar released the Cat 336E H Hybrid Excavator, which uses fuel-saving and emissions reduction technology conceived and perfected at the Technical Center. The Cat 336E H represents a four-year effort to move beyond electric




hybrid technology in favor of hydraulic hybrid systems, resulting in a more cost-effective option for Caterpillar's customers. Compared to a standard 336E excavator, the 336E H uses up to 25 percent less fuel per hour, resulting in fuel cost savings and greenhouse gas reduction of an average 66 tons of CO₂ per year. The 336E features after-treatment regeneration to reduce exhaust emissions. The 336E H is also built to be remanufacturable and can operate on either ultra-low sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or up to 20 percent biodiesel fuel blended with ULSD. In addition, the 336E H is quieter, increasing comfort for the operator and the communities in which it operates.

Champaign-Urbana Mass Transit District

First Time Recipient

The Champaign-Urbana Mass Transit District (CUMTD) provides the University of Illinois and surrounding communities with public transportation options. In 2012, over 11.4 million rides were provided through CUMTD's fixed-route bus service, paratransit service, and demand response van service. Additionally, CUMTD regularly supports other forms of sustainable transportation, such as biking, walking, and car sharing.

To improve the environmental impact of its vehicles, CUMTD uses hybrid and biodiesel buses, has installed diesel particulate filters on 70 percent of its fleet, and requires all bus drivers to follow an anti-idling policy. The Maintenance Department has adopted an Environmental and Sustainability Management System (ESMS) based on the ISO 14001 Standard and has successfully reduced water consumption by implementing a wash bay conservation system and selective vehicle washing. Use of a waste oil heater, rapid roll doors, and specialized recycling have further reduced resource con-




sumption in this department. Significant savings have also been realized at the Administration and Operations building, where a geothermal heating and cooling system, white roof, and permeable parking lot were all installed within the past three years. Finally, CUMTD's main terminal has replaced cleaning products and furnishings with environmentally friendly alternatives. These efforts, combined, saved 786,750 gallons of water and 13,350 therms of natural gas, resulting in total savings of \$4,946 in 2012. CUMTD also makes a large effort to support the community's environmental goals and encourages employee participation in environmental initiatives.

Chem Processing, Inc. – Rockford

Continuous Improvement

Chem Processing, Inc. is a comprehensive metal finisher operating out of a 45,000 square foot facility and employing 100 individuals. For the past 37 years, industries have relied on CPI for quality metal finishing. Industries served include aerospace, agriculture, automotive, construction, defense, food processing, heavy equipment, medical, and pharmaceutical.

From 2011 to 2012, CPI undertook an overhaul of the facility's waste treatment system in order to reduce water use and chemical inputs. A Vibratory Shear Enhanced Processing (VSEP) filtration system was installed, that treats wastewater so that recovered water can be reused through the manufacturing process. The new system has reduced water use by as much as 66 percent and significantly reduced chemical usage and regulated waste. These efforts saved the facility approximately \$90,000 per year.



City of Joliet

First Time Recipient

The City of Joliet has realized a variety of cost-saving and environmental achievements in recent years. These achievements include significant improvements to the city's recycling program, installation of LED traffic signals, and HVAC retrofits at city operated facilities.

Using a \$519,000 Energy Efficiency and Conservation Block Grant from the U.S. Department of Energy, Joliet invested in a partnership with Waste Management of Illinois, Inc. to provide every household with new 96-gallon wheeled recycling containers and introduce an every-other-week collection schedule. Because the recycling containers are five times larger than the previous containers, residents can collect more recyclables and Waste Management is able to deploy fewer collection trucks, reducing total emissions. The City conducted an aggressive outreach campaign to promote the new program, and in the past two years Joliet's residential recycling volumes increased by 34 percent and landfill disposal volumes dropped by 12 percent. Savings resulting from the change are estimated at 81 tons of CO₂ emissions and \$850,000 over two years.

Finally, the City recently retrofitted 57 traffic signals with LED lights and made energy efficiency improvements at major facilities, including Joliet's historic Union Station. These projects combined for energy savings resulted in more than 1.8 million kWh per year.



ComEd – Oakbrook Terrace

Continuous Improvement

Commonwealth Edison (ComEd) is a division of Exelon Corporation, a publicly traded electric utility. ComEd delivers electric service to approximately 70 percent of the state's population. ComEd has been ISO 14001 certified since 2008 and uses the annual cycle of the Environmental Management System to drive sustainability efforts.

Since receiving this award in 2009, ComEd has expanded on many key sustainability initiatives, adding to its extensive green vehicle fleet, improving recycling initiatives, and constructing LEED certified buildings. Additionally, ComEd has worked with the US Fish & Wildlife Service and forest preserve districts to protect threatened and endangered species living in its territories. They have been recognized for their environmental efforts by organizations including the US EPA, US Fish & Wildlife Service, Chicago Wilderness, and Wildlife Habitat Council. ComEd's parent company Exelon is recognized by the Dow Jones Sustainability Index, and has ranked among the top ten S&P 500 utilities by the Carbon Disclosure Project. Finally, ComEd has the unique ability to influence its 3.8 million customers to reduce their environmental footprint, offering them numerous programs to minimize energy consumption.

Eaton's Cooper B-Line – Highland

Continuous Improvement

Eaton's Cooper B-Line is a global provider of innovative support systems and enclosure solutions for engineered facility subsystem applications. Their products are used in a variety of settings for the commercial, industrial, and utility



markets.


After earning the award in 2010, a team of employees completed a project that greatly reduced water consumption and raw material use on their large E-Coat Paint Line. The paint line uses an eight-stage process which includes dipping product into tanks that clean, phosphate, rinse, E-coat and finish with a curing oven. An Ultra Filtration (UF) system was added to the rinse tanks so the water could be reclaimed and fed back into the process. The cleaning chemicals and paint are also removed from the rinse water and recycled back into their respective tanks. The new UF system has resulted in annual savings of 1,135,000 gallons of water, 825 gallons of chemicals, and 1,085 gallons of paint, for a total cost savings of \$44,268.

Elmhurst Park District

Continuous Improvement

The Elmhurst Park District controls 468 acres of land, 25 parks and many other recreational facilities including trails, athletic fields, and swimming pools. The district continues to build a comprehensive sustainability program. This past year, the District completed a review of the Illinois Park and Recreation Association (IPRA) Environmental Report Card and is on the path to creating a long-range environmental plan.

In 2012, District staff identified 735 Ash trees in the park system and the Green Team approved an Emerald Ash Borer Plan. Staff also observed 24 forecasted “Unhealthy for Sensitive Groups” Days, reducing ground-level ozone and airborne particles that pose a threat to human health. Throughout the District, 160 new trees were planted, preventing an estimated 11,375 gallons of stormwater runoff,



and sequestering approximately three tons of atmospheric CO₂. Other benefits include providing wildlife habitats, and enhancing the natural landscape. Finally, the Elmhurst Park District's volunteer program provides for community involvement that assisted their organization in realizing a savings of \$45,963 with 1,982 volunteer hours.

Forest Preserve District of DuPage County – Wheaton
First Time Recipient

The Forest Preserve District of DuPage County's mission is to acquire and hold lands containing forests, prairies, wetlands, and associated plant communities capable of being restored to such natural conditions for the purpose of protecting and sustaining the flora, fauna and scenic beauty for the education, pleasure and recreation of its citizens. With 25,000 acres of green space, which includes 31 lakes, 47 miles of rivers and streams, 933 native plant species and 292 vertebrates, the District's mission and purpose is one of sustainability. The District provides five education centers to promote sustainability initiatives, land appreciation and recreational opportunities that lead to a lifelong learning experience.

In 2001, the Forest Preserve District of DuPage County's Board approved the Fleet Vehicle and Equipment Sustainability policy, which requires all gasoline and diesel powered vehicles to be replaced with alternative fuel technology vehicles. The District currently maintains Illinois' only two alternative fueling stations with four alternative fuels available: Liquid Propane (LPG), Compressed Natural Gas (CNG), Ethanol (E85), and Bio Diesel (B20). The District has entered into several intergovernmental agreements to allow other municipalities to reduce their greenhouse gas emissions by utilizing these fueling stations.




Hilton Chicago

First Time Recipient

The Hilton Chicago, built in 1927 as the Stevens Hotel, was originally the largest hotel in the world with over 3,000 guest rooms. Now with over 1,545 guest rooms, it remains one of the largest hotels in Illinois. The hotel has a long history in Chicago, holding a variety of major events and hosting visits from every U.S. President since Calvin Coolidge. Last year over 1.4 million guests came through the doors of Hilton Chicago.

In 2012, the Hilton Chicago underwent several major sustainability retrofits including: replacement of old kitchen hoods with a demand control ventilation (DVC) system that saved the hotel \$33,522 in its first year; installation of a digital temperature control system allowing Operations to better manage energy consumption; installation of a Natura® water purification system, greatly reducing single-use plastic water bottle usage; installation of automated faucets and low flow toilets; and a very successful cool roof system pilot program. Additionally, the hotel runs a comprehensive waste reduction program, diverting from landfills everything from co-mingled recycling, to electronic waste, to donatable and reusable items. The hotel's compost program, launched in 2010, has been especially successful, diverting over 20,000 pounds of food scraps per month. Hilton Chicago's commitment to sustainability is also reflected in its management practices and employee participation efforts, which include local food sourcing, implementation of a standard operating procedure for sustainable practices, and establishment of an employee Green Team, Social Responsibility Committee, and regular training in sustainable practices.



J.L. Clark – Rockford

Continuous Improvement


J.L. Clark is a 108-year-old manufacturing company that produces decorated metal tins and decorated plastic containers for major industries and consumers. Sustainability is rooted in the company's history: The founder, J.L. Clark himself, hated waste and actually used scrap from manufacturing one product as the raw material for another, forming pill boxes and ointment tins out of what would have been thrown away.

Since earning this award in 2011, J.L. Clark has realized significant additional energy savings and sustainability improvements. By replacing air compressors, improving process efficiency and rebuilding cap molds, the facility reduced energy consumption by 1,297,420 kWh. An initiative to reprogram the mold vision system resulted in a 57 percent reduction in scrap material per day. Finally, J.L. Clark's Zero Waste to Landfill initiative was a major undertaking, requiring documentation of each material type entering the facility and possibilities for elimination, reduction, reuse, or recycling of the material. The company's zero waste efforts have resulted in 96.6 percent of material diverted from landfill, or 2,738,408 pounds total. In sum, the energy saving and waste reduction projects undertaken by J.L. Clark resulted in financial savings of \$335,385 in 2012. Finally, J.L. Clark runs a charitable foundation and has a Community Projects Team that helps employees volunteer with and donate to local organizations.

Jefferson Middle School – Champaign

First Time Recipient

Jefferson Middle School is the largest middle school in




Champaign Unit 4, serving 694 students in a building over 50 years old. The school, district, faculty, staff, and students have demonstrated a dedication to sustainability through a number of initiatives, renovations, and organizations. The summer of 2012 brought to fruition a number of projects devoted to these efforts. A one-kilowatt solar panel was installed on the south roof of the building that not only provides power but also data that students are able to analyze in their science classrooms. In addition, energy efficient lighting, windows, and a building-wide geothermal system were completed and are currently in use. As the year progressed, the school community further committed to the philosophy of sustainability by establishing an on-site Green Team composed of students, parents, and community members. This team began collecting data about paper use, use of disposable lunch trays, current recycling practices, and water bottle usage. This data is now providing a baseline for continuing efforts at education and initiatives to reduce waste. Over the course of the past school year, Jefferson's annual electricity usage was reduced by 4,345 kWh and sustainability efforts have created a total savings of \$46,854. To further extend renewable energy efforts, a team of staff members applied for and received two grants related to wind energy in the spring of 2013. These grants provide curricular materials and professional development offering students the opportunity to investigate sustainability for years to come.

The Label Printers L.P. – Aurora

Continuous Improvement

The Label Printers owns and operates two facilities in Aurora, Illinois, manufacturing and distributing custom labels, packaging materials, and packaging solutions to thousands of customers in 25 countries around the world.




Their *Go Green, Save Green and Earn Green!* sustainability initiative, launched in 2011, aims to continually evaluate and improve the environmental performance of the company's manufacturing and operational practices.

Since earning this award in 2012 The Label Printers have increased their landfill diversion rate from 70 to 82 percent, and decreased VOC emissions to near 50 percent below their 2010 baseline. The company has also implemented internal solid waste audits, replaced paper towels with hand dryers in restrooms, and eliminated the use of disposable paper roll cores in certain processes. Additionally, The Label Printers launched a very successful waste-reduction program called "Take Stock for Education" that invites local schoolteachers to select from excess or unused materials and take them for use in their classrooms, free of charge. The program redistributed an estimated 78,000 linear feet of stock material. These environmental initiatives saved The Label Printers an estimated \$46,000 in 2012.

The Label Printers publicly reports its environmental goals and progress through the sustainability policy and reporting dashboard posted on their website. The company also recently became the first Illinois printer to be certified through the Tag and Label Manufacturers Institute's L.I.F.E. program.

Lewis and Clark Community College – Godfrey *Continuous Improvement*

Since earning the Governor's Sustainability Award in 2011, Lewis and Clark Community College (LCCC) has continued to make aggressive strides toward its lofty goal of campus carbon neutrality in 2058. LCCC has launched many new initiatives in the focus areas of energy conservation, renewable energy production, recycling and reuse, commuting and




campus fleets, policy/behavior change, and student engagement. At the same time, LCCC continues to engage partners from sustainable industries, non-profits, and government agencies to formalize and solidify its commitment to achieve sustainability goals.

In 2012, LCCC realized an additional 9 percent decrease in greenhouse gas emissions on top of the 14 percent reduction achieved in 2011. This achievement is all the more impressive considering the 9.4 percent increase in enrollment and addition of 30,000 square feet of LEED certified buildings in the same interval. LCCC also received a 5-kilowatt fuel cell from the Electric Power Research Institute (EPRI) for use in the eventual Alternative Energy Production Center (AEPC), a “Smart Grid Classroom” project that will integrate a number of renewable and alternative energy systems in a smart grid learning environment. Construction of this project, and installation of the fuel cell, is expected to begin this Fall.

McDonald’s Corporation – Oak Brook

Continuous Improvement

In 2012 McDonald’s Corporation achieved several significant workplace sustainability milestones. An onsite composting program was implemented at McDonald’s Home Office (HO) mid-year diverting over 30 tons of food from the landfill. This contributed to a 2012 landfill diversion rate of 69.8 percent, and the program is on track to quadruple its impact in 2013. Through Green Team and related employee engagement efforts, 97 percent of surveyed employees are satisfied with efforts to green the workplace. Energy use and expenses are down due to targeted project work and ongoing re-commissioning. An LED replacement project netted a 32 percent reduction in energy use, contributing to the 94 En-



ergy Star rating earned by both the Campus Office Building and Plaza headquarters buildings. Water consumption is also down; the implementation of a new Fluid Cooling system is saving, on average, over 5,100 gallons of water per day. Finally, the last two buildings associated with HO campus became LEED certified.

**Metropolitan Mayor's Caucus / Illinois Emerald Ash
Borer Wood Utilization Team – Chicago**

First Time Recipient

The Illinois Emerald Ash Borer (EAB) Wood Utilization Team champions the reclamation of valuable wood products from felled landscape trees. Urban trees, maintained over decades for their contributions of shade, beauty, air quality, energy conservation, and other benefits, can also be useful after they are felled and removed. Currently, felled trees are processed into wood chips for mulch, or firewood, yet there is a growing market for sustainable lumber products.

The EAB Wood Utilization Team promotes this new sustainable model by linking segments along the supply chain – from managers of urban landscapes and sawyers to woodworkers and end users of wood products. The team convened to address the anticipated large volume of ash wood that would result from the state's emerald ash borer infestation and has broadened to promote reclamation of all useable urban wood material. Through advocacy, education and training, demonstration projects and technical support, the Team has built a network of 55 sawyers, trained 130 arborists, assessed timber resources in the Chicago metropolitan region, promoted reclaimed baseball bats on national television, and transferred technology and know-how to help other states create similar regional urban wood efforts.



Multifilm Packaging – Elgin

First Time Recipient


Multifilm Packaging is a manufacturer of flexible packaging, serving mainly the confectionery and snack foods industries. Multifilm is a zero-waste-to-landfill manufacturing facility that utilizes several recycling outlets as well as an in-house repelletizer to make scrap usable again.

Multifilm's claim to sustainability fame has been the Geothermal Process Cooling & HVAC System that replaced a 300-ton chiller, which at almost 20 years old was struggling to keep up with an increased demand in film production. This piece of equipment needed to be replaced, and Multifilm went above and beyond in search for the most energy efficient and environmentally friendly solution. The answer was geothermal energy. Water is pumped from the ground at a temperature near 52 °F to power the AC system and cool machinery. Then, the same water is used in the winter to heat the plant. Multifilm encourages employees to be green as well, and the company recently installed electric vehicle charging stations for employee use.

Niles Township School District 219 with Beyond Green Partners – Niles Township

First Time Recipient

Niles Township School District 219 has a range of long-term sustainability goals and, thanks to their foodservice consultant Beyond Green Partners, has made significant strides toward achieving them. Under Beyond Green's guidance, the School District installed energy efficient dishwashers, purchased reusable service ware, and began separately metering kitchen energy, water and natural gas to refine consumption




monitoring in the kitchen. The school also implemented waste separation, diverting 75 percent of kitchen waste to compost. Savings from these efforts have allowed District 219 to invest in more fresh, local foods for students. The school increased fresh meat served to students by 29 percent, 19 percent more fresh produce, 12 percent more fresh dry goods, and 4 percent more fresh grains.

All initiatives were met with student and faculty engagement. Beyond Green assisted the schools' resource centers and student organizations to create educational videos, signage, and classroom assignments regarding the composting process and landfills. Students were also taught about the changes happening in the cafeteria, toured the kitchens' sustainable design, and viewed a waste video with SWANCC (Solid Waste Association of Northern Cook County) to educate students on the importance of waste separation.

Quaker Foods North America – Bridgeview *Continuous Improvement*

Quaker Foods North America (QFNA), a division of PepsiCo, is one of the largest U.S. manufacturers of hot cereals, cold cereals, snack bars, rice snacks and other products. QFNA operates four production sites in the Midwest including a 393,000 square foot facility in Bridgeview, IL.

In 2012, QFNA completed several sustainability initiatives at the plant in Bridgeview, IL realizing a total savings of \$122,346. The plant completed a compressed air reduction program, reducing energy consumption by 1,056,662 kWh and savings \$88,620. The second initiative was LED fixture upgrades that resulted in an annual reduction of 270,335 kWh and savings of \$21,626. The plant also replaced a thirty-year-old stand-alone boiler with a new heat exchanger



that ties into the existing high-efficiency steam boilers. This upgrade lowered natural gas usage by 12,200 therms and saved \$7,400 per year. Finally, installation of an outside make up air supply for the plant air compressors resulted in a reduction of 59,886 kWh and savings of \$ 4,700 per year. QFNA also sponsors associate activities to promote America Recycles Day and Earth Day.

Quaker Foods North America – Danville


First Time Recipient

Quaker Foods North America's 514,000 square foot facility in Danville, IL also completed several sustainability initiatives in 2012 that resulted in savings of over \$215,000. Water savings initiatives included conversion of a vacuum pump cooling system, calibration of water flow through an air washer, and behavioral changes. These initiatives saved the plant over 6 million gallons of water in one year (over \$30,000 in savings). Natural gas savings initiatives included space temperature set back, insulation repairs, piping isolation and leak repairs that saved the plant over 220,000 therms in 2012 (over \$95,000 savings). Electrical savings initiatives included control of conveyor motors and compressed air reduction that saved the plant over 2 million kWh in 2012 (over \$90,000 savings). Finally, the amount of waste that goes to landfill was reduced by over 600,000 pounds in 2012 by increasing the recycling rate of the plant and finding new users for organic waste such as animal feed manufacturers. The plant reduced the percentage of waste that goes to landfill from 7.7 percent in 2011 to 4.7 percent in 2012.

United Airlines – Chicago

First Time Recipient

United Airlines and United Express operate an average of




5,446 flights per day to more than 370 airports across six continents. In 2012, United and United Express carried more passenger traffic than any other airline in the world and operated nearly two million flights carrying 140 million customers.

United has implemented sustainability practices throughout the company, reducing fuel use and improving fuel efficiency through technology and process innovation, advancing and using environmentally responsible and cost-efficient alternative fuels, improving the sustainability of products and facilities, managing and reducing waste, and partnering with stakeholders. In 2012, the airline saved nearly 83 million gallons of fuel through various initiatives such as investing in a modern, fuel-efficient fleet to replace less fuel efficient aircraft, technology improvements, onboard weight reduction, and adding winglets to over 330 of its planes. The use of sustainable aviation biofuels helps United achieve its goals of cost stability, improving energy security, and reducing the environmental impact of fuel sources. In 2012, United, along with Boeing, Honeywell's UOP, the Chicago Department of Aviation, and the Clean Energy Trust, launched the Midwest Aviation Sustainable Biofuels Initiative (MASBI). MASBI is an effort by 40+ plus organizations from across the aviation biofuels supply chain to develop recommendations to achieve the potential economic, environmental, and energy security benefits that can be delivered from a robust sustainable aviation biofuels industry in the Midwest.

University of Illinois at Chicago

Continuous Improvement

The University of Illinois at Chicago (UIC) continues to identify opportunities to promote recycling, increase use of public transit, reduce emissions, and creatively fund student-




initiated sustainability projects. Nearly 40 percent of UIC's vehicle fleet use alternative fuels. Of the 234 vehicles, 91 are hybrid or run on E85, CNG, electricity or biodiesel. In 2012, eleven alternative fuel vehicles were added to the fleet including three passenger buses. Additionally, solar photovoltaic systems on two campus buildings produced 138,487 kWh of clean energy, and lighting retrofits of 20,000 lamps resulted in an approximate 1,250,000 kWh reduction in electricity consumption.

A unique recycling program at UIC collects empty pipette tip boxes from laboratory buildings. This segregated stream of clean, #5 polypropylene plastic represented nearly 7,200 pounds of landfill diversion in 2012. The University also makes a significant effort to collect and properly recycle unwanted electronics. The Campus Electronic Recycling Collection event saw nearly 2,000 electronics units turned in, and total electronic recycling activity for 2012 was up 28 percent over the previous year. Approximately 10 percent of UIC staff and faculty use the new transit benefit program, saving money and encouraging mass transit usage. Finally, students recently voted to pay a \$4 per-semester Green Fee to support green energy purchasing, research and demonstration projects around campus. A committee of students, guided by staff, decides how to spend the approximately \$180,000 annually.

University of Illinois at Urbana-Champaign

Continuous Improvement

The University of Illinois at Urbana-Champaign is a world leader in research, teaching and public engagement, and distinguished by the breadth of the programs, broad academic excellence, and internationally renowned faculty. The Urbana-Champaign campus is also a leader in sustainable




campus operations, as the first Big Ten University to submit a climate action plan to the American College and Universities Presidents' Climate Commitment. The Illinois Climate Action Plan (iCAP), submitted in 2010, put forward more than 100 different projects to help the University reach its goal of carbon neutrality by 2050. A great number of these projects are related to energy conservation, water conservation and waste reduction. The energy consumption goal is a reduction of 20 percent by 2015, in 2012 campus had already realized a reduction of 25 percent. The water consumption reduction goal is also 20 percent by 2015. In 2012, the University had achieved 19 percent reduction, only 1 percent shy of the 2015 goal. The campus goal for waste diversion is 75 percent by 2015. By 2012, the diversion rate was already 84.5 percent.

Village of Arlington Heights

First Time Recipient

The Village of Arlington Heights has enacted a broad spectrum of programs and initiatives with the goal of improving environmental health and encouraging environmental awareness. The Village has a long-standing Environmental Commission that works toward implementing various energy efficient and environmentally conscious programs. The Village has replaced High Pressure Sodium Fixtures with LED decorative street lighting, and installed LED traffic signals, parking garage lighting retrofits, and solar-powered warning sirens. A solar-powered bike shelter was also recently installed at the train station. Arlington Heights has also initiated a program to reduce salt usage on Village roadways and introduced the use of biodiesel fuel for its truck fleet. The Village's environmental projects have reduced operational electricity use by 647,000 kWh and fuel consumption by 3,000 gallons, for an annual savings of \$30,000.




The Village of Arlington Heights is proactive in educating its employees and the public on sustainability measures and their value by disseminating information via the Village website, cable television, and written communication. Information includes an anti-idling program to save gasoline while reducing vehicle emissions and promoting the new LED technologies that have been integrated into Village projects. The success of many of the Village's new programs and procedures speaks to the value of adopting sustainable efforts within the community.

Village of Bolingbrook

First Time Recipient

The Village of Bolingbrook has implemented several programs that elevate municipal government and community awareness of the responsibility of being active stewards for the environment. The Village motto is "A wonderful place to live, work and play" and is embraced at every level of the community. Village officials, residents and commerce have fostered a strong sense of spirit among the population 74,000.

There are eleven buildings owned by the Village that have undergone environmental upgrades that have reduced environmental impacts and operational costs. These efforts include lighting upgrades, installation of high-efficiency HVAC components, stormwater management, recycling programs and environmentally preferable VOC cleaning solutions. The Village also benefits from strong leadership and commitment from the Mayor and the Village Trustees who champion environmental sustainability programs by modernizing village code and fostering a mentality that helps serve the wellness of the environment and the wellbeing of its resi-



dents. Bolingbrook has received awards acknowledging its environmental practices - such as the Clean Air Counts Gold Awards and is an active member of the Metropolitan Mayors Greenest Region Compact. An Energy Efficiency and Conservation Block Grant helped replacement of inefficient heating and cooling ventilation systems.

Village of Downers Grove


First Time Recipient

The Village of Downers Grove has utilized an “all-of-the-above” approach to sustainability with a focus on achieving measurable results through operational improvements. Every year since 2008 the Village has hosted a *Recycling Extravaganza* where residents can drop off items for proper recycling or reuse, including unwanted electronics, batteries, paper, glasses, and worn-out American flags. Other environmental initiatives include stormwater runoff reduction, operation of a largely alternative-fuel vehicle fleet, lighting retrofits, and installation of a hybrid solar and wind-powered street lighting system – the first of its kind in a residential area in the US. The Village has involved the community in these efforts through volunteer programs, sharing of its sustainability efforts, and fostering an environment of eco-consciousness in the community.

Governor’s Sustainability Award – Honorable Mention

Argonne National Laboratory

Argonne’s ongoing sustainability achievements include establishing the Sustainable Employee Commute Committee who arranges for on-site transportation options, encourages




employees to utilize regional mass transit, and develops and tracks telework and vanpool options; the Building 214 High Performance Building Upgrade project involved upgrades to reduce water and electricity usage; and a solar photovoltaic array and wind turbine were installed. Argonne estimates that these projects annually save \$127,600; 233 tons of greenhouse gas emissions; 85,428 gallons of water; and 6,476 therms of natural gas.

CCI Manufacturing IL Corporation – Lemont

CCI Manufacturing IL Corporation, a global exporter, provides antifreeze/long life coolant, brake fluid and windshield washer fluid. Their facility is certified to ISO14001 & OH-SAS18001 for an integrated environmental health & safety management system. CCI's sustainability achievements include: paper recycling and reuse in the office environment; adoption of Illinois Smart Energy Design Assistance Center evaluation suggestions; manufacturing process improvements to increase recycling; and antifreeze process waste recycling.

Christopher B. Burke Engineering, Ltd. – Rosemont

Christopher B. Burke Engineering, Ltd. (CBBEL) has put in place a variety of sustainability programs, especially for reducing employee commuting impacts. CBBEL has a Bike to Work program, which has reduced car commute miles by more than 170,000 miles since 2006; offers carpool options and incentives; and recently became the first corporate member of I-GO, Chicago's local non-profit car sharing company. CBBEL has also created a rooftop garden on their office building; installed a second electric car charging station and occupancy sensors in all non-office areas; and converted interior fluorescent light fixtures from T12 lamps to energy



efficient T5 lamps.

City of Evanston


The Evanston Climate Action Plan (ECAP) sets forth a goal of reducing the community's greenhouse gas emissions by 13 percent below 2005 levels. In 2012, the city took a dramatic step toward fulfilling the ECAP's commitment. Evanston's Community Choice Electricity Aggregation Program was established with the goal of negotiating more favorable electricity supply terms and greater choice in the types of energy supplied to aggregated customers. In the first six months of the city's Aggregation Program, Evanston residents and small businesses saved approximately \$1,600,000, and the plan is estimated to have reduced emissions by 128,743 tons of CO₂.

Clarke – Roselle

Clarke is a global provider of integrated mosquito control and aquatic services solutions. In 2012 they achieved significant progress in recycling rates and overall waste reductions, calculated its carbon footprint, made operational changes to save fuel, paper and energy, and benefited from Green Power contracts and on-site solar power. As a result of these efforts, Clarke achieved a 24 percent reduction in carbon footprint, reduced total waste by 45 percent and diverted 70 percent of its total waste from landfill. Additionally, Clarke employee volunteers contributed 2,687 hours to local community initiatives.

Clover Technologies Group – Hoffman Estates

Clover is a provider of imaging supplies and the world's largest collector and recycler of inkjet and laser print car-




tridges. Clover procures empty cartridges to sustain its manufacturing operations, while also leveraging its infrastructure to collect cell phones, other consumer electronics, printers, and printer components. The millions of units collected annually by Clover are remanufactured, remarketed or recycled through Clover and its network of strategic partners. In 2012, through its collection operations, Clover was able to divert 49.9 million pounds of waste from landfills.

Ecology Action Center – Normal

In 2012 the Ecology Action Center (EAC) of Normal, Illinois created a public fundraising and awareness campaign to raise the necessary funds for the first-ever locally funded Household Hazardous Waste collection in McLean County. The nearly year-long effort resulted in tremendous community collaboration, significantly increased visibility of the issue of HHW disposal, and a highly successful September 2012 HHW collection event. An estimated 3,000 households were serviced by the event with nearly 162,000 pounds of household hazardous waste and safely collected and prevented from entering local surface water or ground water supplies through improper disposal.

First Busey Corporation – Champaign

First Busey has implemented a sustainability program across the company that includes employee awareness, purchasing efficiencies, waste reduction, water conservation, landscaping improvements, and pollution prevention. In 2012, Busey completed its Illinois Green Business Association (IGBA) certification, completing 135 of the Green Management Practices on IGBA's checklist including turning off lights and computer monitors when not in use and making educated decisions on heating and cooling methods. Busey also offers



an array of online banking capabilities allowing customers to reduce paper waste.

Illinois Department of Military Affairs – Springfield

The Illinois Department of Military Affairs recently undertook a major remodeling project for the Urbana Armory, originally built in 1938 as part of the national Work Projects Administration (WPA) Program. The \$15.3 million rehabilitation effort retained vital historic features of the armory, while putting in place energy-saving and environmental features that are expected to earn the building LEED Gold Certification. Work included upgrades to the mechanical, electrical, data/telecommunications and plumbing systems; replacement of the windows and roof; rehabilitation of exterior walls and corroded lintels. The project team diverted 81 percent of construction and demolition materials from the landfill, and the building's annual energy savings are expected to be 17.9 percent.

Illinois Department of Transportation – Springfield

The Illinois Department of Transportation (IDOT) recently published the Illinois State Transportation Plan, providing strategic direction for developing a safe, sustainable multi-modal transportation system. IDOT is integrating sustainable practices into all facets of its transportation project planning process, including all modes of transportation. During 2012, IDOT published the Long Range Transportation / Sustainable Action Plan, established the Illinois Sustainability Transportation Program and began implementation of the Sustainability Scorecard, an evaluation tool for all new IDOT projects.



Illinois Green Business Association – Champaign

The Illinois Green Business Association (IGBA) is a non-profit organization committed to improving sustainable practices in Illinois businesses through education and engagement. IGBA has three main programs: green business certification, efficient equipment installation, and education. Since October 2008, IGBA has engaged 41 businesses, encompassing 595,554 square feet and 969 employees, in greener practices throughout central and northern Illinois through its certification program. Since September 2011, IGBA has engaged over 1,100 small businesses in Ameren Illinois and Nicor Gas territories in energy efficiency upgrades. In total, IGBA has saved businesses over 843,310 kWh of electricity and 325,126 therms of natural gas. IGBA also held its first-annual Illinois Green Business Summit in 2012, engaging over 200 attendees from around the state.

Lawrence Foods – Elk Grove Village

Since winning the Illinois Governor's Sustainability Award in 2012, Lawrence Foods, Inc. (LFI), a bakery ingredients manufacturer, has continued to improve its sustainability performance. Accomplishments in the past year include: insulation improvements in two tempered cooler areas, saving over 60,000 kWh over a nine-month period; installation of a new boiler to consolidated steam production, reducing natural gas consumption by 10 percent annually; and continued reduction of suspended solids and Biological Oxygen Demand in effluent process water. LFI also requested that its suppliers aim to increase the recyclability of its packaging.



Portapure, LLC – Chicago

Chicago-based Portapure invents, designs, and manufactures affordable and portable ease-of-use water filtration products for disaster sites and for the developing world, enabling development of clean water micro-businesses and access to clean water for communities. Portapure's breakthrough design removes 99.99 percent of sediment, bacteria and viruses, including Cholera, Typhoid, Amoebic Dysentery, E. Coli, Coliform Bacteria, Cryptosporidium, Streptococcus, Salmonella and Giardia. Portapure PureLives is an easily transportable five-gallon container that fits into a harness for safe backpack carrying. Portapure was recently accepted into the Impact Engine Accelerator program – an intensive 12-week program for entrepreneurs with cutting edge ideas for solving the planet's most acute environmental and societal problems.

Will County – Joliet

In 2012, Will County created and passed a Countywide Energy Plan. Over the course of a year, the Land Use Department with assistance from consultants and through several public outreach meetings, updated the county's zoning code to encourage recycling and energy efficiency. Additionally, the County Board adopted a resolution to participate in the Department of Energy's Better Building Challenge. To date, Will County buildings enrolled in the program have achieved a 13 percent energy reduction when compared to 2009 base rates. Will County buildings continue to benefit from energy efficiency retrofits, including the addition of a cool, reflective roof on the County's Nursing Home. Finally, the County's employee Green Team developed office policies around energy use, water consumption, and recycling.




Illinois Campus Sustainability Compact Awards Program

The Illinois Campus Sustainability Compact outlines environmental goals that colleges and universities throughout Illinois may adopt on their campuses. The Compact includes objectives such as purchasing renewable energy, implementing green building practices, developing sustainable transportation options, improving water conservation, and incorporating sustainable dining practices. Campuses are recognized at the Bronze, Silver or Gold level.

More information can be found at green.illinois.gov.

Danville Area Community College – Danville *Silver*

From an active community garden program to comprehensive waste management plans, Danville Area Community College (DACC) has moved towards a more sustainable campus. DACC has set a number of ambitious but achievable goals for 2020. Using 2010 as a baseline, facilities will reduce energy use, water use and solid waste by 20 percent and make important updates to the campus waste management plan. DACC has put recycling into the hands of the students by providing more outlets for paper, bottle, can and battery recycling throughout campus. Finally, DACC has taken on the role of community steward, cooperating with two local community projects that promote sustainability and environmental issues. They actively promote community gardens with a local neighborhood association and participate in Keep America Beautiful's sustainability program.



Heartland Community College

Gold

Between a campus-wide greenhouse gas inventory and an integrated green team that furthers environmental initiatives and unites stakeholders, Heartland Community College (HCC) has shown a commitment to sustainability in higher education. Heartland's Green Institute provides valuable sustainability resources such as green curriculum training and green job education, while integrating sustainability into daily campus operations.


Heartland has focused immediate efforts on energy and waste reduction. Officials recently conducted greenhouse gas inventories and established a baseline from which to measure energy efficiency projects. A recently-installed 1.65 MW wind turbine generates energy for daily operations, including the new electric vehicle charging stations. The student-run Good to Go Commuter Challenge and regular recycling events allow the Heartland community to participate in environmental stewardship.

HCC also adopted single stream recycling in April of 2013 with the goal of increasing waste reduction by 5% during the first year alone. These decisions have led HCC to identify sustainability and stewardship as foundational commitments for the college's forthcoming strategic plan.

Lewis University – Romeoville

Silver

Since achieving bronze certification last year, Lewis University has made many new strides in sustainability. The University's Sustainability Council now has more student



participants, providing more direct student involvement in campus sustainability issues. Additionally, sustainability has been integrated into the core-science curriculum of Lewis University. Students can study environmental issues as they apply to biology, chemistry and the earth sciences.


By 2018, Lewis University plans to achieve a landfill diversion rate of 50 percent, and by 2020 the University aims to reduce overall waste by 20 percent. Waste Management Inc. recently conducted a complete-system waste audit, which prompted the University to improve the environmental performance of cleaning supply purchases and pest management practices. In conjunction with these initiatives, Lewis University joined the Chicago Higher Education Retrofit Project to study best practices for energy efficiency and formulate creative ideas for more sustainable schools.

McHenry County College – Crystal Lake

Bronze

McHenry County College has charted a clear course to a more sustainable campus. The new MCC Sustainability Center acts as the focal point of sustainability on campus. The center works closely with the multi-disciplinary MCC Sustainability Committee to ensure environmental action across campus. MCC also recently launched a website to educate students and faculty about sustainability issues on campus.

MCC's Sustainability Strategic Plan identifies three main goals and a number of strategies for achieving them: reduce MCC's carbon footprint, establish a sustainability outreach program and expand the sustainability efforts to the McHenry County Community. MCC students played an integral role in the development of the sustainability plan, particularly the members of Down to Earth, a student-led environmental



advocacy group. Enhanced recycling programs and green landscaping alternatives are among the sustainability initiatives developed and promoted by students.

Northwestern University – Evanston

Gold


Northwestern University has established a comprehensive sustainability program that enhances their Evanston campus as well as the surrounding community. NU participates in AASHE's Sustainability Tracking, Assessment & Rating System and recently revamped their sustainability website to include interactive and educational components for putting the master sustainability plan into action.

The NU Office of Sustainability has developed a working group, with representation from student groups and deans across school functions, for integrating sustainability into the curriculum; NU students have created an Eco-Rep program to educate and facilitate sustainability programs throughout the dormitories; and University leadership has set a goal of reducing greenhouse gas emissions by 30 percent, below the 2005 baseline.

Prairie State College – Chicago Heights

Silver

Prairie State College (PSC) has adopted and implemented a number of campus-wide sustainable policies. In February, the PSC faculty and staff sustainability committee welcomed involvement from the newly-formed student sustainability club. The groups work closely together and communicate with the Student Government Association to enact campus-wide change. As a direct result, PSC identified three immediate goals pertaining to waste management, green purchasing



and electric vehicle charging stations. Since 2011, recycling bins have been added to classrooms and public spaces increasing recycling by nearly 20 percent.

PSC's 2015 sustainability plan outlines initiatives to reduce energy consumption by 10 percent; achieve a 40 percent waste-diversion rate and 20 percent reduction in paper use; and purchase only Clorox green-cleaning supplies.

Roosevelt University – Chicago

Silver

From ambitious local food programs to native prairie restoration, Roosevelt University's sustainability initiatives extend their reach from the city of Chicago to the nearby suburb of Schaumburg. Roosevelt has established a sustainability website and hired a SERF (Society of Environmentally Responsible Facilities)-certified sustainability coordinator to manage campus initiatives.

The Roosevelt University sustainability team set a number of environmental goals. Initiatives include achieving a university-wide diversion rate of 50% by 2015, a 100% e-waste recycling rate by 2014 and a 50% compost rate in Roosevelt's Wabash Dining Center in the Loop. Roosevelt also wrote its first sustainable purchasing and services policy to guide faculty purchasing decisions. They've committed to recycled paper, local and organic foods, green cleaning supplies as well as integrated pest management for the Schaumburg prairie and Wabash green roof.



CONFERENCE GREENING ELEMENTS

We would like to thank the Embassy Suites East Peoria for working with us to provide a facility and services that met our expectations for environmentally sustainable practices.

For today's event we have arranged for:

- Recycling collection in public areas (handled by Waste Management Inc.)
- Collection of kitchen scraps and leftovers for composting (handled by Midwest Fiber)
- Coffee and tea served in reusable mugs
- Food, condiments, and snacks served on reusables wherever possible
- No single-serve beverage containers

Embassy Suites already has the following best-practices in place at their facility:

- Ability for guests to reuse towels, bedding and toiletries
- Donation of leftover soaps and shampoos to local shelter
- Cooking oil collected for recycling
- Extensive use of daylighting in public and lobby areas





Illinois Sustainable Technology Center
1 Hazelwood Drive
Champaign, IL
217-333-8940
istc.illinois.edu

*A division of the
Prairie Research Institute at
University of Illinois Urbana-Champaign*



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN